

REMARKS/ARGUMENTS

Page 2, Paragraph 3 of the Office Communication states:

"It is requested that the actual steps conducted in the "SCORIM process" be recited in the claims"

In Paper No. 10 (mailed July 1, 2003), Applicants were required to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. Applicants elected Species 1) Structural foam polymer. Applicants did not elect species 6) Article formed by SCORIM process. Applicants request that the requirement to have the actual steps conducted in the "SCORIM process" recited in the claims be held in abeyance until a generic claim is finally held to be allowable.

Claim Rejections 35 USC 103(a)

Claims 1 and 3-4 are rejected under 35 USC 103(a) as being unpatentable over Pinnavaia et al. (5,801,216). This rejection is respectfully traversed for the following reasons.

U.S. Patent 5,801,216 (Pinnavaia) does not teach or suggest flowing the nanocomposite polymer to align the planes of the one, two, three, four and five layers of silicate material so that more than one half of the planes have the same orientation within thirty degrees as determined by electron microscopy, as required in Claims 1 and 3-4. Instead, it teaches applying strain to the surface of a rubbery epoxy matrix to align the planes of the silicates. The alignment of the planes of the silicates in Pinnavaia involves a solid state deformation process. It does not involve flowing the polymer (the polymer must be in melted or liquid form in order for it to flow). Since the strain is applied only to the surface of the resin, only the planes of the silicates on the surface of the resin are aligned. The silicates on the surface of the resin do not constitute more than one half of the silicates present in the nanocomposite polymer and, therefore, Pinnavaia does not teach more than one half of the planes have the same orientation within thirty degrees.

In view of the above, Applicants submit that Claims 1, and 3-4 are patentable over Pinnavaia et al.

Respectfully submitted,



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